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# FEE TRANSMITTAL

## for FY 2003

Effective 01/01/2003. Patent fees are subject to annual revision.

 Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ 686.00)

## Complete if Known

Application Number	09/885,319
Filing Date	June 19, 2001
First Named Inventor	Mark A. Stan
Examiner Name	Mutschler, Brian L.
Art Unit	1753
Attorney Docket No.	1613370-0006

RECEIVED  
JUN 13 2003  
TC 1700

## METHOD OF PAYMENT (check all that apply)

 Check  Credit card  Money Order  Other  None Deposit Account:

Deposit Account Number	23-1703
Deposit Account Name	White & Case LLP

The Director is authorized to: (check all that apply)

Charge fee(s) indicated below  Credit any overpayments  
 Charge any additional fee(s) during the pendency of this application  
 Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

## FEE CALCULATION

## 1. BASIC FILING FEE

Large Entity	Small Entity	Fee Code (\$)	Fee Code (\$)	Fee Description	Fee Paid
1001	750	2001	375	Utility filing fee	
1002	330	2002	165	Design filing fee	
1003	520	2003	260	Plant filing fee	
1004	750	2004	375	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	
SUBTOTAL (1) (\$)					

## 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims	Independent Claims	Multiple Dependent	Extra Claims	Fee from below	Fee Paid
45	-20** =		8	x 18	= 144
7	- 3** =		3	x 84	= 252
					=

Large Entity	Small Entity	Fee Description
Fee Code (\$)	Fee Code (\$)	
1202	18	2202 9 Claims in excess of 20
1201	84	2201 42 Independent claims in excess of 3
1203	280	2203 140 Multiple dependent claim, if not paid
1204	84	2204 42 ** Reissue independent claims over original patent
1205	18	2205 9 ** Reissue claims in excess of 20 and over original patent
SUBTOTAL (2) (\$ 396.00)		

\*\*or number previously paid, if greater; For Reissues, see above

## 3. ADDITIONAL FEES

Large Entity Small Entity

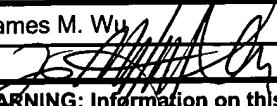
Fee Code (\$)	Fee Code (\$)	Fee Description	Fee Paid
1051	130	2051 65 Surcharge - late filing fee or oath	
1052	50	2052 25 Surcharge - late provisional filing fee or cover sheet	
1053	130	1053 130 Non-English specification	
1812	2,520	1812 2,520 For filing a request for ex parte reexamination	
1804	920*	1804 920* Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805 1,840* Requesting publication of SIR after Examiner action	
1251	110	2251 55 Extension for reply within first month	110.00
1252	410	2252 205 Extension for reply within second month	
1253	930	2253 465 Extension for reply within third month	
1254	1,450	2254 725 Extension for reply within fourth month	
1255	1,970	2255 985 Extension for reply within fifth month	
1401	320	2401 160 Notice of Appeal	
1402	320	2402 160 Filing a brief in support of an appeal	
1403	280	2403 140 Request for oral hearing	
1451	1,510	1451 1,510 Petition to institute a public use proceeding	
1452	110	2452 55 Petition to revive - unavoidable	
1453	1,300	2453 650 Petition to revive - unintentional	
1501	1,300	2501 650 Utility issue fee (or reissue)	
1502	470	2502 235 Design issue fee	
1503	630	2503 315 Plant issue fee	
1460	130	1460 130 Petitions to the Commissioner	
1807	50	1807 50 Processing fee under 37 CFR 1.17(q)	
1806	180	1806 180 Submission of Information Disclosure Stmt	180.00
8021	40	8021 40 Recording each patent assignment per property (times number of properties)	
1809	750	2809 375 Filing a submission after final rejection (37 CFR 1.129(a))	
1810	750	2810 375 For each additional invention to be examined (37 CFR 1.129(b))	
1801	750	2801 375 Request for Continued Examination (RCE)	
1802	900	1802 900 Request for expedited examination of a design application	

Other fee (specify) \_\_\_\_\_

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$ 290.00)

(Complete if applicable)

Name (Print/Type)	James M. Wu	Registration No. (Attorney/Agent)	45,241	Telephone	65-231-0300
Signature				Date	May 15, 2003

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.





**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Application of: Mark A. Stan *et al.*

#  
11

Serial No.: 09/885,319

Group Art Unit: 1753

Filed: June 19, 2001

Examiner: Mutschler, Brian L.

For: **An Apparatus And Method For  
Optimizing The Efficiency Of  
Germanium Junctions In Multi-  
Junction Solar Cells**

White & Case Docket No.: 1613370-0006

I hereby certify that this paper is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on May 15, 2003.

Melissa McCool  
Name

May 15, 2003  
Dated

**REQUEST FOR CORRECTION OF OFFICIAL FILING RECEIPT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Enclosed please find a copy of the updated filing receipt dated January 2, 2002 for the above-captioned application, a copy illustrating the necessary corrections in red, and related supporting papers. Applicants request that the following corrections be made and that a new corrected filing receipt be issued reflecting the changes:

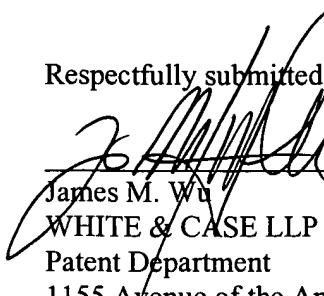
\* Domestic Priority Data:

THIS APPLN CLAIMS BENEFIT OF 60/212,552 06/19/2000

Please make the correction and issue a corrected filing receipt. Applicants believe that no fee is due with this Request for Correction of Official Filing Receipt. However, please charge any required fee to White & Case LLP Deposit Account No. 23-1703. A copy of this sheet is enclosed.

Date: May 15, 2003

Respectfully submitted,

  
James M. Wu 45,241  
WHITE & CASE LLP (Reg. No.)  
Patent Department  
1155 Avenue of the Americas  
New York, New York 10036  
(650) 213-0300

Enclosures



UNITED STATES PATENT AND TRADEMARK OFFICE

**COPY**

COMMISSIONER FOR PATENTS  
UNITED STATES PATENT AND TRADEMARK OFFICE  
WASHINGTON, D.C. 20231  
www.uspto.gov

APPLICATION NUMBER	FILING DATE	GRP ART UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	DRAWINGS	TOT CLAIMS	IND CLAIMS
09/885,319	06/19/2001	1753	1226	1613370-0006	5	37	4

007470  
WHITE & CASE LLP  
PATENT DEPARTMENT  
1155 AVENUE OF THE AMERICAS  
NEW YORK, NY 10036

CONFIRMATION NO. 4594  
UPDATED FILING RECEIPT



\*OC000000007248752\*

Date Mailed: 01/02/2002

Receipt is acknowledged of this nonprovisional Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Customer Service Center. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

**Applicant(s)**

Mark A. Stan, Albuquerque, NM;  
Nein Y. Li, Sunnyvale, CA;  
Frank A. Spadafora, Albuquerque, NM;  
Hong Q. Hou, Albuquerque, NM;  
Paul R. Sharps, Albuquerque, NM;  
Navid S. Fatemi, Albuquerque, NM;

**Domestic Priority data as claimed by applicant**

19  
THIS APPLN CLAIMS BENEFIT OF 60/212,552 06/20/2000 \*  
(\*) Data inconsistent with PTO records.

**Foreign Applications**

If Required, Foreign Filing License Granted 08/11/2001

Projected Publication Date: 04/11/2002

Non-Publication Request: No

Early Publication Request: No

Title

WHITE & CASE LLP  
PATENT DEPARTMENT  
JAN 6 2002  
RECEIVED

Apparatus and method for optimizing the efficiency of germanium junctions in multi-junction solar cells

**Preliminary Class**

136

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**LICENSE FOR FOREIGN FILING UNDER  
Title 35, United States Code, Section 184  
Title 37, Code of Federal Regulations, 5.11 & 5.15**

**GRANTED**

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

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**NOT GRANTED**

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).



**COPY**

Express Mail No.: EL 363 986 662 US

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Mark A. Stan et al.

Serial No.: To be assigned

Filed: June 19, 2000  
Even Date Herewith

Title: AN APPARATUS AND METHOD FOR OPTIMIZING THE  
EFFICIENCY OF GERMANIUM JUNCTIONS IN MULTI-  
JUNCTION SOLAR CELLS

Atty. Docket No.: 1613370-0006

**EXPRESS MAIL CERTIFICATE**

Box: Provisional Application  
Assistant Commissioner for Patents  
Washington, D.C. 20231

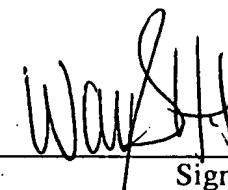
Sir:

I hereby certify that the following papers for the above-identified provisional application are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on June 19, 2000 and are addressed to: The Assistant Commissioner for Patents, Washington, D.C. 20231

Provisional Application for Patent Cover Sheet  
Fee Transmittal Form  
Specification (6 pages)  
Drawings (5 sheets, informal)  
Return Post Card

---

Warren S. Heit  
Typed Name

 Reg. No. 36,828  
Signature

EXPRESS MAIL NO.: 5U 303900002 US

Assistant Commissioner for Patents  
Box Provisional Application  
Washington, D.C. 20231

Date 00 / 19 , 00

Atty. Docket 1613370.

Serial No. TBA

Sir:

Kindly acknowledge receipt of the accompanying:

Specification and Claims 6 pages

Oath or Declaration and Power of Attorney  Executed  Not Executed

5 Sheets of \_\_\_\_\_ formal \_\_\_\_\_ informal drawings

Check for \$ \_\_\_\_\_ (filing fee)

Small entity declaration

Assignment and Check for \$ \_\_\_\_\_

Request 37 CFR 1.53c 1.53d  1.53b

Petition under 37 CFR 1.136 and Check \$ \_\_\_\_\_

Other (specify) return postcard, prov. Appl. for Patent Cover Sheet, Fee Transmittal, Express Mail Certifica

by placing your receiving date stamp hereon and mailing or returning to deliverer.

37 CFR 1.8  
37 CFR 1.10  
By Hand

New Appln.

Continuation

Divisional

CIP

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**COPY****PROVISIONAL APPLICATION FOR PATENT COVER SHEET**

This is a request for filing a PROVISIONAL APPLICATION FOR PATENT under 37 CFR 1.53(c).

**INVENTOR(S)**

Given Name (first and middle (if any)) Mark A.	Family Name or Surname Stan	Residence Albuquerque, NM
---	--------------------------------	------------------------------

 Additional inventors are being named on the 1 separately numbered sheet(s) attached hereto**TITLE OF INVENTION (280 characters max)**

An Apparatus and Method for Optimizing the Efficiency of Germanium Junctions in Multi-Junction Solar Cells

**CORRESPONDENCE ADDRESS**

Direct all correspondence to:

<input checked="" type="checkbox"/> Customer Number OR	007470	<input type="checkbox"/> Place Customer Number Bar Code Label here
Type Customer Number here		

<input type="checkbox"/> Firm or Individual Name				
Address				
Address				
City		State		Zip
Country		Telephone		Fax

**ENCLOSED APPLICATION PARTS (check all that apply)**

<input checked="" type="checkbox"/> Specification Number of Pages	6	<input type="checkbox"/> Small Entity Statement
<input checked="" type="checkbox"/> Drawing(s) Number of Sheets	5	<input type="checkbox"/> Other (specify) _____

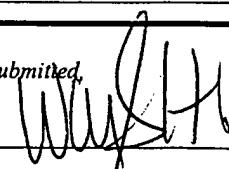
**METHOD OF PAYMENT FILING FEES FOR THIS PROVISIONAL APPLICATION FOR PATENT (check one)**

<input type="checkbox"/> A check or money order is enclosed to cover the filing fees	FILING FEE AMOUNT (\$)
<input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge filing fees or credit any overpayment to Deposit Account Number: 23-1708	\$150.00

The invention was made by an agency of the United States Government or under a contract with an agency of the United States Government.

<input checked="" type="checkbox"/> No.	
<input type="checkbox"/> Yes, the name of the U.S. Government agency and the Government contract number are: _____	

Respectfully submitted,

SIGNATURE 

TYPE OR PRINTED NAME

Warren S. Heit

TELEPHONE

(650) 213-0321

Date June 19, 2000

REGISTRATION NO.  
(if appropriate)

36,828

Docket Number:

1613370-0006

**USE ONLY FOR FILING A PROVISIONAL APPLICATION FOR PATENT**

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Box Provisional Application, Assistant Commissioner for Patents, Washington, DC 20231.

**PROVISIONAL APPLICATION OVER SHEET**  
**Additional Page**

PTO/SB/16 (12-97)

Approved for use through 1/31/98. OMB 0651-0037

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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Docket Number	1613370-00000	Type a plus sign (+) inside this box →	+
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**INVENTOR(S)/APPLICANT(S)**

Given Name (first and middle [if any])	Family or Surname	Residence (City and either State or Foreign County)
Nein Y.	Li	Albuquerque, NM
Frank A.	Spadafora	Albuquerque, NM
Hong Q.	Hou	Albuquerque, NM
Paul R.	Sharps	Albuquerque, NM
Novid S.	Fatemi	Albuquerque, NM



**COPY**

PTO/SB/17 (12/99)

Approved for use through 09/30/2000. OMB 0651-0032  
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

# FEE TRANSMITTAL for FY 2000

Patent fees are subject to annual revision.

Small Entity payments must be supported by a small entity statement, otherwise large entity fees must be paid. See Forms PTO/SB/09-12. See 37 C.F.R. §§ 1.27 and 1.28.

**TOTAL AMOUNT OF PAYMENT** **(\$)** **150.00**

## Complete If Known

Application Number	To be assigned
Filing Date	Even Date Herewith
First Named Inventor	Mark A. Stan
Examiner Name	To be assigned
Group / Art Unit	To be assigned
Attorney Docket No.	1613370-0006

## METHOD OF PAYMENT (check one)

1.  The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:

Deposit Account Number

23-1708

Deposit Account Name

White & Case LLP

Charge Any Additional Fee Required Under 37 CFR §§ 1.16 and 1.17

2.  Payment Enclosed:

Check  Money Order  Other

## FEE CALCULATION

### 1. BASIC FILING FEE

Large Entity	Small Entity	Fee Code (\$)	Fee Code (\$)	Fee Description	Fee Paid
101 690	201 345	Utility filing fee			
106 310	206 155	Design filing fee			
107 480	207 240	Plant filing fee			
108 690	208 345	Reissue filing fee			
114 150	214 75	Provisional filing fee			150.00

**SUBTOTAL (1) (\$)** **150.00**

### 2. EXTRA CLAIM FEES

Extra Claims	Fee from below	Fee Paid
Total Claims	-20* =	X =
Independent Claims	-3** =	X =
Multiple Dependent		=

\*or number previously paid, if greater; For Reissues, see below

### Large Entity Small Entity

Fee Code (\$)	Fee Code (\$)	Fee Description
103 18	203 9	Claims in excess of 20
102 78	202 39	Independent claims in excess of 3
104 260	204 130	Multiple dependent claim, if not paid
109 78	209 39	** Reissue independent claims over original patent
110 18	210 9	** Reissue claims in excess of 20 and over original patent

**SUBTOTAL (2) (\$)** **150.00**

### 3. ADDITIONAL FEES

Large Entity	Small Entity	Fee Code (\$)	Fee Code (\$)	Fee Description	Fee Paid
105 130	205 65	Surcharge - late filing fee or oath			
127 50	227 25	Surcharge - late provisional filing fee or cover sheet			
139 130	139 130	Non-English specification			
147 2,520	147 2,520	For filing a request for reexamination			
112 920*	112 920*	Requesting publication of SIR prior to Examiner action			
113 1,840*	113 1,840*	Requesting publication of SIR after Examiner action			
115 110	215 55	Extension for reply within first month			
116 380	216 190	Extension for reply within second month			
117 870	217 435	Extension for reply within third month			
118 1,360	218 680	Extension for reply within fourth month			
128 1,850	228 925	Extension for reply within fifth month			
119 300	219 150	Notice of Appeal			
120 300	220 150	Filing a brief in support of an appeal			
121 260	221 130	Request for oral hearing			
138 1,510	138 1,510	Petition to institute a public use proceeding			
140 110	240 55	Petition to revive - unavoidable			
141 1,210	241 605	Petition to revive - unintentional			
142 1,210	242 605	Utility issue fee (or reissue)			
143 430	243 215	Design issue fee			
144 580	244 290	Plant issue fee			
122 130	122 130	Petitions to the Commissioner			
123 50	123 50	Petitions related to provisional applications			
126 240	126 240	Submission of Information Disclosure Stmt			
581 40	581 40	Recording each patent assignment per property (times number of properties)			
146 690	246 345	Filing a submission after final rejection (37 CFR § 1.129(a))			
149 690	249 345	For each additional invention to be examined (37 CFR § 1.129(b))			
Other fee (specify) _____					
Other fee (specify) _____					

\* Reduced by Basic Filing Fee Paid

**SUBTOTAL (3) (\$)**

## SUBMITTED BY

Name (Print/Type)	Warren S. Heit	Registration No. (Attorney/Agent)	36,828	Telephone	(650) 213-0300
Signature				Date	June 19, 2000

## WARNING:

Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

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